

ABSTRACT OF THE DISCLOSURE

Wire bond pad and solder ball or controlled collapse chip connections C4 are combined on a planar surface of a an integrated circuit device to provide a die. Known good die (KGD) testing is optionally performed using wire bond connections or stress tolerant solder ball connections. The KGD testing is conducted after the integrated circuit dies are diced from a wafer. Solder ball or C4 array connections which withstand thermal stress are used to KGD test the die prior to final use of the wire bond pad connections to an end use device. Alternatively, wire bond pads are used to test the die while maintaining the solder ball or C4 array in a pristine condition for bonding to a final end product device. Both testing with the solder ball C4 array contacts and with the wire bond connections provides metallurgical connections for the KGD test. The solder ball or C4 array is connected to the wire bond pads and either connection can be used to burn-in test the die.

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